CLAIMS

1.- Electronic equipment for safety and control of workers characterised in that it consists of:

a) repeaters: modules forming the "guide line", which receive and transmit voice and data;
b) fire fighter units: personalised devices attached to the arm of each fire fighter that inform at all times on the status and location of the fire fighter and of the device itself;
c) pressure gauges: device provided in each autonomous breathing unit (ABU) that informs on the air pressure and remaining breathing time;
d) central system: unit that communicates with the personalised fire fighter units either directly or through the repeaters and analyses the information received with a computer.

2.- Repeater according to claim 1, characterised in that it incorporates an audible signal by beeps (short and long) and a flashing visible signal that shows the fire fighter the way out, each repeater connected by radio with the adjacent repeaters of the "guide line" and with the nearby fire fighter units; transmitting information upstream from the fire fighter units or from other repeaters to the central system, and transmitting information downstream from the central system to the fire fighter units by the repeaters, acting as a voice repeater when the fire fighter carries a radio transmitter, and incorporating a thermometer whose measurement is sent to the central system.

3.- Fire fighter unit according to claim 1, characterised in that it is automatically activated by a motion sensor and that emits, when the motion sensor is activated, a sequence indicating that the fire fighter is OK to the central system or to the nearest repeater, which then sends it to the central system; indicating that a fire fighter is unconscious when no motion is detected over a certain time; receiving the data frames sent by the pressure gauge when the fire fighter is using an ABU and sending them directly to the

central system or through the nearest repeater, and receiving warnings from the central system.

4.- Pressure gauge according to claim 1 that measures the air pressure and the air time in minutes remaining in the bottle and displays it together with the operational status of the pressure gauge itself in a LCD display, characterised in that it also sends this pressure, time and operational status information by radio to the personalised unit of the fire fighter assigned to it, this assignation performed at the start of consumption of the ABU air by approaching the pressure gauge to the personalised fire fighter unit.

5.- Central system according to claim 1, characterised in that it receives the information from the personalised fire fighter units either directly or through the first repeater of the "guide line", and which emits personalised or collective transmissions to the personalised fire fighter units either directly or through the first repeater.